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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,463	07/13/2001	Stefano Faccin	975.358US01	4383

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EXAMINER
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TRAN, TONGOC

ART UNIT	PAPER NUMBER
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2134

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/21/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

09/905,463

Applicant(s)

FACCIN ET AL.

Examiner

Tongoc Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-38, 43-45 and 54-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-38, 43045 and 54-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is in response to Applicant's After-Final Amendment filed on March 16, 2006. Claims 29-38 and 43-45 have been amended. Claims 54-59 have been added. Claims 29-38, 43-45 and 54-59 are pending.

### ***Response to Arguments***

2. Applicant's amendment in respect to claims 29-38 and 43-45 has overcome the rejection under 35 U.S.C. 112. Therefore, claims 29-38 and 43-45 have been withdrawn. In respect to the rejected claims 20-38 and 43-45 under Double Patenting rejection. Applicants stated since "according to '688, the user agent response includes information that the authentication will be performed using a UMTS AKA mechanism does not indicate that the corresponding network element performs the determination". However, as disclosed in the Specification of the Patent '688, "SIP invitations used to create sessions carrying session descriptions which allow participants to agree on a set of compatible media types. SIP supports user mobility by *proxying and redirecting requests to the user's current location*. Users can register that current location. SIP is not designed to be independent of the lower-layer transport protocol and can be extended with additional capabilities" Faccien et al., '688, col. 1, lines 40-47). Applicant's claim language broadly recites "wherein the network control element is further adapted to determine whether it has to perform a verification of the authentication, and, in case the network control element does not have to perform the verification, to forward a scheduled result to a second network control element by

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including the scheduled result into the session invitation message". This claimed limitation is reasonably interpreted to be the network control element is examining the incoming packet to see if it is required to perform the authentication process or to forward or redirecting to other network control element which is what proxying and redirecting packet encompasses.

In response to Applicant's remark to rejection under 35 U.S.C. 103(a), Applicant contends that the cited prior art, Handley and Hardjono fail to teach or suggest "at least the feature of in case the network control element does not have to perform the verification, to forward a scheduled result to a second network control element by including the scheduled result into the session invitation message, as recited in claim 29. Applicant further asserts that since Hardjono fails to disclose or suggest that the received data packet contains a session invitation message. Thus Hardjono fails to cure the admitted deficiencies of Handley. Even though Hardjono does not teach the data packet contains a session invitation message. However, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). The claimed limitation is reasonably interpreted to be merely a network device examining an incoming packet to determine whether the packet required to be authenticated or forwarding or redirecting and as stated in the above paragraph, "SIP supports user mobility by proxying and

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redirecting requests to the user's current location". Hardjono discloses in the cited portion of the reference, "...for example, verifying that the routing information 210 is consistent with other routing information received by the receiving router, decrypting the routing information 210, and/or authenticating the routing information 210 using authentication information contained in the routing information...". Since Hardjono verifying routing information using authentication information contained in the data packet and SIP packet provide support for proxying and redirecting, it would have been obvious to combine the taught of processing data packet using authentication information contained in the SIP packet taught by Handley so that data can be properly processed or redirecting to the user.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 29, 54 and 59 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 20, of U.S. Patent No. 7,024,688. Although the conflicting claims are not identical, they are not patentably distinct from each other. *In the claim 29 of instant Application, the claimed limitation recites a network control element adapted to determine whether it has to perform a verification of the authentication and forward a scheduled result if it does not have to perform verification and receive the scheduled result from another network control element and extract the scheduled result and forward the session invitation message without the scheduled result to the subscriber equipment and verify the authentication result with a scheduled result.* The claims 1 and 20 of U.S. Patent case recites method and program storage device executed by a machine to authenticating a user agent and a server using Session initiation Protocol (SIP) messages. *The claimed limitation recites forwarding a request for authentication from the server to the user agent in response to the SIP request, the request for authentication including information (AuthData) that the authentication will be performed; forwarding an authentication response from the user agent to the server in response to the request for authentication wherein the field therein comprises RES (response) and AUS (synchronization failure parameters); perform an involved SIP procedure on the server if the authentication is deemed successful in view of the authentication response.* Since the instant Application teaches a network control element determine whether to perform authentication

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verification before forwarding the SIP message to the subscriber equipment. The U.S. Patent teaches user agent response to server authentication request including information that the authentication will be performed using a Universal Mobile Telecommunication System (UMTS) authentication and Key Agreement (AKA) mechanism, wherein a field wherein comprises AUTN (authentication token ) and RAND (random challenge) and RAN and AUTN vectors *are included in a SIP WWW-Authenticate or a Proxy-Authenticate response header field and performing an involved SIP procedure on the server in response to the SIP request if the authentication is deemed successful in view of the authentication response.* Therefore, it would have been obvious that a network control element would have to be adapted to inspect the header field to determine whether a verification for authentication is needed before forwarding the response to the next network control element or receiving device. Verification for authentication encompasses extracting information from the data packets and comparing and matching authentication result with predetermined received information.

Claims 30-38, 43-45 and 55-58 are dependent claims and also are rejected because by their dependency, they contain the language of the independent claim.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29-38 and 43-45 and 54-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Handley et al., hereinafter Handley, ("Network Working Group", March 1999) in view of Hardjono (U.S. Patent No. 6,425,004).

In respect to claim 29, Handley discloses a network control element, wherein during a subscriber equipment terminated call, the network control element is adapted to send a session invitation message to the subscriber equipment, the session invitation message including authentication information, wherein the network control element is further adapted to determine whether it has to perform a verification of the authentication, and, in case the network control element does not perform the verification, to forward a scheduled result (AuthResp) to a second network control element by including the scheduled result into the session invitation message wherein the network control element is adapted (e.g. page 6, (1.1), page 24, (3), pages 25-26, (4.1), page 28, (4.2.1), page 41, (6.1), page 42, (6.3-6.4), (6.26) Proxy Authenticate, (6.27) Proxy-Authorization (6.28) Proxy-require, page 74, (6.4), www-Authenticate, page 108-109, Message Integrity and Access Control Authentication).

Handley does not disclose the detail in case the network control element has to perform the verification, to receive the scheduled result (AuthResp) from another network control element, wherein the scheduled result is included in the session invitation message extract the scheduled result (AuthResp) from the session invitation message and to forward the session invitation message without the scheduled result (AuthResp) to the subscriber equipment, and to verify the authentication result



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(AuthData2) with a scheduled result (AuthResp). However, Hardjono discloses receiving data packet from other router, the receiving router verifies the routing information in the packet...authenticating the routing information using authentication information contained in the routing information (e.g. Hardjono, Fig. 8, col. 5, line 60-col. 6, line 18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Handley's call handling using SIP with Hardjono's teaching of verifying the routing information to ensure the integrity of routing information before they are forwarded the appropriate destination.

In respect to claim 30, Handley and Hardjono disclose the network control element according to claim 29, wherein the network control element is adapted to receive a response message as a response to the session invitation message from a subscriber equipment, the response message including a result of an authentication procedure performed by the subscriber equipment (e.g. Handley, pages 42-44, 59-61 and 115)

In respect to claim 31, Handley and Hardjono disclose the network control element according to claim 30, wherein the network control element is adapted to verify the authentication procedure result (e.g. Handley, pages 42-44, 59-61 and 115).

In respect to claim 32, Handley and Hardjono disclose the network control element according to claim 31, wherein the network control element is adapted for

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forwarding the response message of the subscriber equipment to an originating entity initiating the session invitation without the result of the authentication procedure in case of a positive verification (e.g. Handley, pages 42-44, 59-61 and 115)

In respect to claim 33, Handley and Hardjono disclose the network control element according to claim 31, wherein the network control element is adapted to forward a failure message to an originating entity initiating the session invitation in case of a negative verification (e.g. Handley pages 42-44, 59-61, and 115).

In respect of claim 34, Handley and Hardjono disclose the network control element according to claim 29, wherein in the network the SIP (Session Initiation Protocol) protocol is adopted as a control protocol (e.g. Handley, pages 42-44, 59-61 and 115).

In respect to claim 35, Handley and Hardjono disclose the network control element according to claim 34, wherein the session invitation message is a SIP INVITE request including an authentication header field (e.g. Handley, pages 114-117).

In respect to claim 36, Handley and Hardjono disclose the network control element according to claim 34, wherein the response message is a SIP response message including an authorization header field (e.g. Handley, pages 25-26 and pages 114-117).

In respect to claim 37, Handley and Hardjono disclose the network control element according to claim 31, wherein the network control element performing the verification is adapted to serve an originating entity initiating the session invitation (e.g. Handley pages 25-26, 41-61 and page 112-116).

In respect to claim 38, Handley and Hardjono disclose the network control element according to claim 31 wherein the network control element performing the verification is adapted to serve the subscriber equipment

In respect to claim 43, Handley and Hardjono disclose the network control element according to claim 29, wherein the network control element is further adapted to receive a response message from the subscriber equipment, the response message including a result (AuthData 2) of the authentication procedure and network authentication information (AuthData3) which is used by the subscriber equipment to perform an authentication of the network (e.g. Handley pages 25-26, 41-61 and page 112-116).

In respect to claim 44, Handley and Hardjono disclose the network control element according to claim 43, wherein the network control element is further adapted to determine a network authentication result (AuthData4) in response to the network authentication information (AuthData4) and to send the network authentication result

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(AuthData4) to the subscriber equipment (e.g. Handley pages 25-26, 41-61 and page 112-116).

In respect to claim 45, Handley and Hardjono disclose the network control element according to claim 31, wherein the network control element is adapted to repeat the verification for a predetermined number of times, wherein different authentication information (AuthData1) are used (e.g. Handley, pages 114-117).

In respect to claims 54-59, the claimed limitations are method and computer program claims that are substantially similar to system claim 29 and 31-33. Therefore, claims 54-59 are rejected based on the similar rationale.

### ***Conclusion***

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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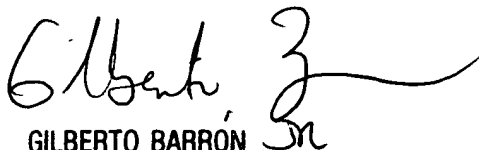
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tongoc Tran whose telephone number is (571) 272-3843. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on (571) 272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TT  
December 18, 2006

  
GILBERTO BARRON  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100